



PTO/SB/08a/b (08-03)  
Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/799,177	
			Filing Date	March 12, 2004	
			First Named Inventor	David Spencer Pearson	
			Art Unit	2666	
			Examiner Name	S. S. Rao	
Sheet	1	of	3	Attorney Docket Number	BBNT-P01-015

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA*	US-4,445,116	04-24-1984	Grow	
	AB*	US-5,307,410	04-26-1994	Bennett	
	AC*	US-5,469,432	11-21-1995	Gat	
	AD*	US-5,764,767	06-09-1998	Beimel et al.	
	AE*	US-5,911,018	06-08-1999	Bischel et al.	
	AF*	US-5,960,131	09-28-1999	Fouquet et al.	
	AG*	US-5,960,133	09-28-1999	Tomlinson	
	AH*	US-6,005,993	12-21-1999	MacDonald	
	AI*	US-6,028,935	02-22-2000	Rarity et al.	
	AJ*	US-6,097,696-A	08/2000	Doverspike, Robert D.	
	AK*	US-6,130,780	10-10-2000	Joannopoulos et al.	
	AL*	US-6,154,586	11-28-2000	MacDonald et al.	
	AM*	US-6,507,012-B1	01/2003	Medard et al	
	AN*	US-6,678,379-B1	01/2004	Mayers et al	
	AO*	US-5,311,572	05/1994	Friedes et al.	
	AP*	US-5,602,916	02/1997	Grube et al.	
	AQ*	US-6,341,127	01/2002	Katsube et al.	
	AR*	US-6,529,498	03/2003	Cheng	
	AS*	US-6,538,990	11/2003	Mahalingaiah et al.	
	AT*	US-6,560,707	05/2003	Curtis et al.	
	AU*	US-6,654,346	11/2003	Mahalingaiah et al.	
	AV*	US-6,754,214	06/2004	Mahalingaiah	
	AW*	US-6,836,463	12/2004	Garcia-Luna Aceves et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	"Quantum key distribution: Real-time compensation of interferometer phase drift," NTNU Department of Physical Electronics, pages 1-45.	
	CB	Awduche, D.O., et al., "Multi-Protocol Lambda Switching: Combining MPLS Traffic Engineering Control With Optical Crossconnects," Internet Draft (January 2001).	
	CC	Basak, D., et al., "Multi-protocol Lambda Switching: Issues in Combining MPLS Traffic Engineering Control With Optical Cross-connects," Internet draft (August 2000).	

Examiner Signature	/Hosuk Song/	Date Considered	03/18/2008
-----------------------	--------------	--------------------	------------

9899833 1.DOC

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /HS/

Substitute for form 1449A/B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			Application Number	10/799,177	
			Filing Date	March 12, 2004	
			First Named Inventor	David Spencer Pearson	
			Art Unit	2666	
			Examiner Name	S. S. Rao	
Sheet	2	of	3	Attorney Docket Number	BBNT-P01-015

CD	Bennett, C.H., et al., "Experimental Quantum Cryptography," Journal of Cryptography's special issue after Eurocrypt '90, 28 pages (September 1991).
CE	Bennett, C.H., et al., "Generalized Privacy Amplification," IBM Research, 24 pages (May 31, 1995).
CF	Bennett, C.H., et al., "Quantum Cryptography: Public Key Distribution and Coin Tossing," Proceedings of IEEE International Conference on Computers, Systems & Signal Processing, Bangalore, India, pp. 175-179, December 10-12, 1984.
CG	Bethune, D.S., et al., "An Autocompensating Fiber-Optic Quantum Cryptography System Based on Polarization Splitting of Light," IEEE Journal of Quantum Electronics, XX(Y):100-108 (1999).
CH	Bethune, D.S., et al., "Prototype Autocompensating Quantum Cryptography System Based on Polarization Splitting of Light," Session QC41 – Quantum Computing and Cryptograph, Oral session, Wednesday morning, March 24, 1999, Liberty Room, Omni Hotel.
CI	Brassard, G., et al., "Secret-Key Reconciliation by Public Discussion," Department IRO, Universite de Montreal, 14 pages (1994).
CJ	Cabello, A., "Multiparty key distribution and secret sharing based on entanglement swapping," pp. 1-8, (September 7, 2000).
CK	Crepeau, C., et al., "Secure Multi-party Quantum Computation," ACM, pp. 1-10 (2001).
CL	Eisenberg, S., "Lucent Technologies names Cherry Murray physical sciences research vice president," Press Release (March 28, 2000).
CM	Ekert, A.K., "Quantum Cryptography Based on Bell's Theorem," Physical Review Letters, 67(6):661-663 (1991).
CN	Elliott, B.B., et al., "Path-length control in a interferometric QKD link," Proc. of SPIE, Vol. #5101, 11 pages (April 21, 2003).
CO	Franson, J.D., "Bell Inequality for Position and Time," Physical Review Letters, 62(19):2205-2208 (1989).
CP	Gisin, N., et al., "Quantum cryptography and long distance Bell experiments: How to control decoherence," Geneva, Switzerland, pages 1-7 and 4 pages of drawings (January 15, 1999).
CQ	Gisin, N., et al., "Quantum cryptography," Reviews of Modern Physics, 74:145-184 (2002).
CR	Gottesman, D., et al., "Secure quantum key distribution using squeezed states," pp. 1-19 (September 25, 2000).
CS	Jennwein, T., et al., "Quantum Cryptography with Entangled Photons," Physical Review Letters, 84(20):4729-4732 (2000).
CT	Lin, L.Y., et al., "Free-Space Micromachined Optical Switches for Optical Networking," IEEE Journal of Selected Topics in Quantum Electronics, 5(1):4-9 (1999).
CU	Maurer, U., et al., "Information-Theoretic Key Agreement: From Weak to Strong Secrecy for Free," Computer Science Department, Swiss Federal Institute of Technology, 20 pages (2000).
CV	Maurer, U.M., "Secret Key Agreement by Public Discussion From Common Information," IEEE Transactions on Information Theory, 39:733-742 (1993).
CW	Mo, X., et al., "Intrinsic-Stabilization Uni-Directional Quantum Key Distribution Between Beijing and Tianjin," Key Lab of Quantum Information, Department of Electronic Engineering and Information Science, University of Science and Technology of China, Hefei, Anhui.
CX	Naik, D.S., et al., "Entangled State Quantum Cryptography: Eavesdropping on the Ekert Protocol," Physical Review Letters, 84(20):4733-4736 (2000).
CY	Ribordy, G., et al., "Long-distance entanglement-based quantum key distribution," Physical Review A, Volume 63, 012309-1-012309-12 (2001).
CZ	Rosen, E., et al., "Multiprotocol Label Switching Architecture," MPLS Architecture, 1-61 (January 2001).
CA1	Scarani, V., et al., "Quantum Cryptography Protocols Robust Against Photon Number Splitting Attacks for Weak Lazer Pulse Implementations," Physical Review Letters, 92(5):057901-1

Examiner Signature	/Hosuk Song/	Date Considered	03/18/2008
--------------------	--------------	-----------------	------------

Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				Application Number	10/799,177
				Filing Date	March 12, 2004
				First Named Inventor	David Spencer Pearson
				Art Unit	2666
				Examiner Name	S. S. Rao
Sheet	3	of	3	Attorney Docket Number	BBNT-P01-015

		through 057901-4 (February 2004).	
	CB1	Scarani, V., et al., "Quantum cryptography protocols robust against photon number splitting attacks," ERATO Conference on Quantum Information Science 2003, September 4-6, 2003, Nijimakaikan, Kyoto Japan; 2 pages.	
	CC1	Slutsky, B., et al., "Defense frontier analysis of quantum cryptographic systems," Applied Optics, 37(14):2869-2878 (1998).	
	CD1	Stucki, D., et al., "Quantum Key Distribution over 67 km with a plug&play system," New Journal of Physics, 41.1-41.8 (2002).	
	CE1	Tanzilli, S., et al., "PPLN waveguide for quantum communication," Eur. Phys. J.D., 18:155-160 (2002).	
	CF1	Tittel, W., et al., "Long-distance Bell-type tests using energy-time entangled photons," Physical Review A, 59(6):4150-4163 (1999).	
	CG1	Walker, J.A., "Telecommunications Applications of MEMS," mstnews, pp. 6-9 (March 2000).	
	CH1	Xiao, L., et al., "Efficient Multi-Party Quantum Secret Sharing Schemes," pp. 1-7 (May 28, 2004).	
	CI1	Degermark, M., et al., "Small Forwarding Tables for Fast Routing Lookups," ACM, pages 3-14 (1997).	
	CJ1	Estrin, D., et al., "Security Issues in Policy Routing," IEEE, pages 183-193 (1989).	
	CK1	Garcia-Luna-Aceves, J.J., et al., "Distributed, Scalable Routing Based on Vectors of Link States," IEEE Journal on Selected Areas in Communications, 13(8):1383-1395 (October 1995).	
	CL1	Garcia-Luna-Aceves, J.J., et al., "Scalable Link-State Internet Routing," Network Protocols (October 13-16, 1998).	
	CM1	Lakshman, T.V., et al., "High-Speed Policy-based Packet Forwarding Using Efficient Multi-dimensional Range Matching," Proceedings of the ACM SIGCOMM'98 conference on Applications, technologies, architectures and protocols for computer communication, pages 203-214 (1998).	
	CN1	Lampson, B., et al., "IP Lookups Using Multiway and Multicolumn Search," IEEE/ACM Transactions on Networking, 7(3):324-334 (June 1999).	
	CO1	Ramanathan, R., et al., "Hierarchically-organized, multihop mobile wireless networks for quality-of-service support," Mobile Networks and Applications, 3:101-119 (1998).	
	CP1	Tsai, W.T., "An Adaptive Hierarchical Routing Protocol," IEEE Transactions on Computers, 38(8):1059-1075 (August 1989).	
	CQ1	Waldvogel, M., et al., "Scalable High Speed IP Routing Lookups," ACM, pages 25-36 (1997).	
	CR1	Bowers, J.E., "Optical Network and Component Trends," UCSB, NSF Workshop, 51 pages.	
	CS1	Honjo, T., et al., "Differential-phase-shift Quantum Key Distribution," NTT Technical Review, 2(12):26-33 (Dec. 2004).	
	CT1	Nambu, Y., et al., "BB84 Quantum Key Distribution System based on Silicon-Based Planar Lightwave Circuits," Fundamental and Environmental Research Laboratories and Fiber Optic Devices Division, pages 1-11.	
	CU1	Paniccia, M., "Silicon Integrated Photonics," UCSB, 30 pages, February 2, 2005.	
	CV1	Tomita, A., et al., "Recent Progress in Quantum Key Transmission," NEC J. of Adv. Tech., 2(1):84-91 (Winter 2005).	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Hosuk Song/	Date Considered	03/18/2008
--------------------	--------------	-----------------	------------